

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**7**

**INFORMATION**

**TOPIC**

**Draft 2008 State List of CWA Section 303(d) Impaired Waters**

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Section 303(d) of the federal Clean Water Act (CWA) requires that each state prepare, every two years, a list of its waters that do not fully meet state water quality standards. Iowa's 2008 draft of impaired waters is part of Iowa's "integrated report." According to U.S. EPA guidance, states should provide a single water quality monitoring and assessment report—the Integrated Report—that combines the water quality reporting requirements of Section 305(b), the impaired waters listing requirements of Section 303(d), and the lakes reporting requirements of Section 314 of the CWA. Integrated reports are to be composed of five categories that are designed to give the public and other stakeholders a comprehensive summary of the water quality status in the state. Category 5 of the Integrated Report is the state's Section 303(d) list of impaired waters. Waters in Category 5 must be prioritized for preparation of a total maximum daily load (TMDL) to determine the load of pollutants that a water can receive and still meet state water quality standards.

Iowa's draft 2008 list of impaired waters contains 441 waterbodies. The draft list is a subset of the approximately 1,120 Iowa waterbodies or waterbody segments (streams, rivers, lakes, and wetlands) assessed for support of state water quality standards by IDNR staff. For comparison, Iowa's final 2006 list of impaired waters contained 279 waterbodies; the final 2004 list contained 225 waterbodies. The draft 2008 list will be available for public notice for a period of 60 days from December 10, 2008 through February 5, 2009. Following the close of the public comment period, IDNR will prepare a responsiveness summary of comments received. Changes in the list will be made based on public comments, and IDNR will submit the revised draft to U.S. EPA Region 7 for review and final approval.

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Memo Date : November 14, 2008

## Iowa's DRAFT 2008 List of Impaired Waters

John Olson  
Watershed Monitoring & Assessment Section,  
Iowa DNR  
for  
Meeting of the Iowa  
Environmental Protection Commission  
December 9, 2008



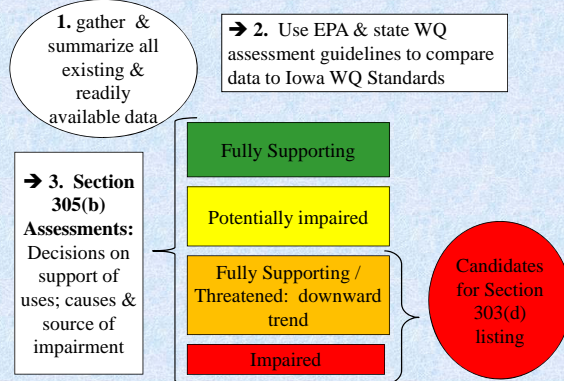
*Acknowledgements: other Watershed Monitoring & Assessment Section staff involved with WQ assessments & list development:*

- Ken Krier & Tom Wilton: biological assessments of streams & rivers
- Lisa Fascher: lake assessments
- Jamie Mootz: database development & support
- Cam Conrad: map preparation & web page
- Mary Skopec: supervisor

## Background of the Impaired Waters (Section 303(d)) List

- Required by Section 303(d) of the Clean Water Act
- Due from all states every two years
- Identifies waters that do not fully meet applicable WQ Standards and that need a TMDL (= *total maximum daily load*)
- Is Category 5 of the "Integrated Report"

## The 305(b) water quality assessment process



## The Integrated Report

- EPA's most recent recommended format (2002)
- Combines (integrates) CWA reporting requirements for Sections 305(b), 303(d), and 314
  - 305(b): measure progress in meeting WQ goals
  - 303(d): waters impaired & in need of a TMDL
  - 314: status of significant, publicly-owned lakes
- Includes assessments for rivers/streams, lakes, & wetlands (= "waters" or "waterbodies")
- First used by IDNR for the 2004 cycle

## Integrated Report Categories (according to EPA guidance)

### THE FIVE CATEGORIES:

1. All designated uses (swim, fish, &/or DW) met
2. Some uses met; insufficient data to determine if other uses are met
3. Insufficient data to determine if any use met
4. Impaired but a TMDL is not needed
5. Impaired and a TMDL is needed (=303(d) list)

*States are allowed to create subcategories*

## Iowa's DRAFT 2008 Integrated Report:

(based on WQ data from ~2000 through 2006)

Of the 1,125 waters assessed. . .

Category 1. All designated uses are met: 15 (1.3% of the assessed waters)

Category 2. At least one use met; insufficient data to determine if other uses met: 375 (33.3% of assessed waters)

Category 3. Insufficient data to determine if any use met: 194 (17.2% of all waters in assessment database)

**"Impaired"**

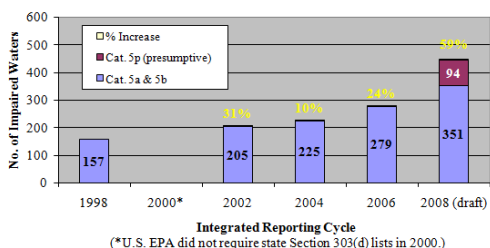
- Category 4.\* Impaired but a TMDL is not needed: 96 (8.5% of assessed waters)
- Category 5.\* Impaired and a TMDL is needed (**=303(d) list**): 445 (39.6% of assessed waters)

\*Total number of impaired waters = 541

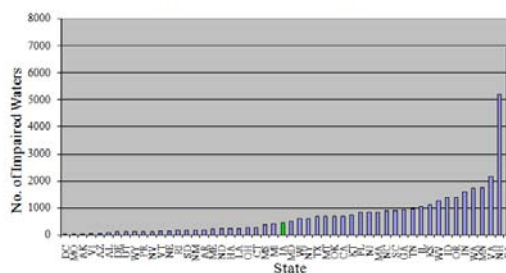
## Iowa's DRAFT 2008 list of impaired waters (the 303(d) list; IR Cat. 5)

- Contains ~445 waterbodies and ~670 impairments
  - 362 river/stream segments
  - 77 lakes and reservoirs
  - 2 wetlands
  - 4 segments of federal flood control reservoirs
- Additions to the draft 2008 list are due to:
  - additional monitoring
  - cumulative nature of list
  - change in *Iowa WQ Standards*, March 2006: the "rebuttable presumption"

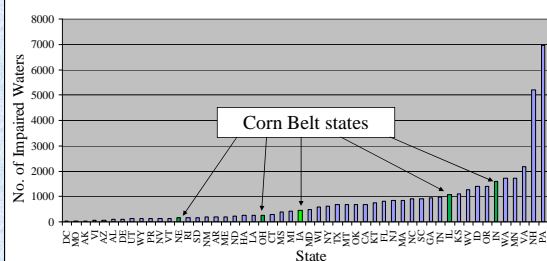
Comparison of numbers of impaired waterbodies on Iowa's Section 303(d) lists [IR Category 5], 1998-2008.



Numbers of Section 303(d) impaired waters per state; data from 2004 and 2006 listing cycles; Iowa data from draft 2008 list (see [http://iaspub.epa.gov/waters10/attains\\_nation\\_cy.control?p\\_report\\_type=T](http://iaspub.epa.gov/waters10/attains_nation_cy.control?p_report_type=T))

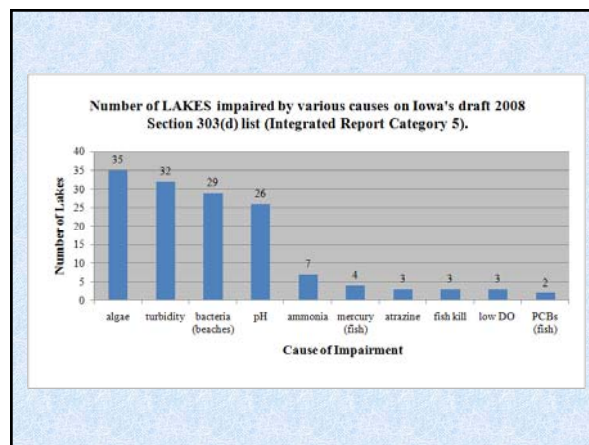
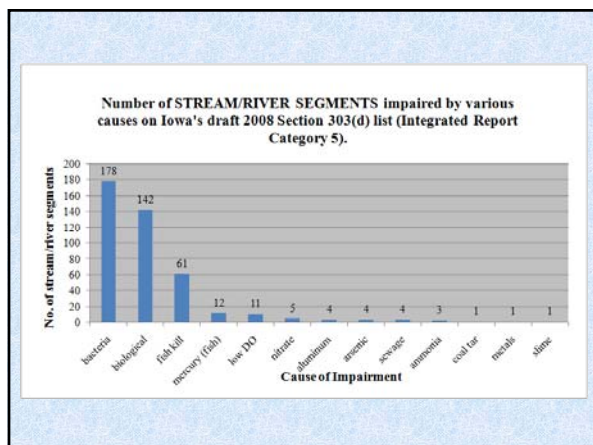
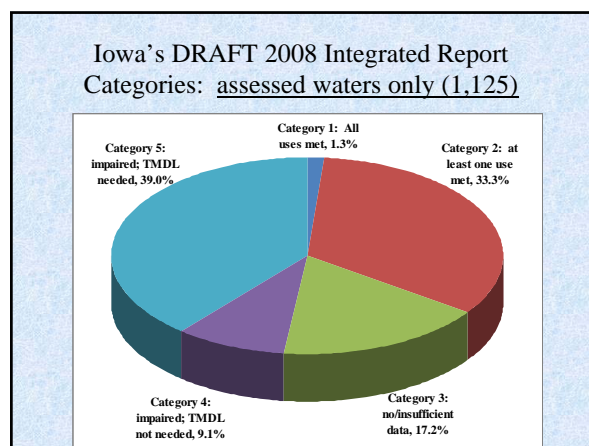
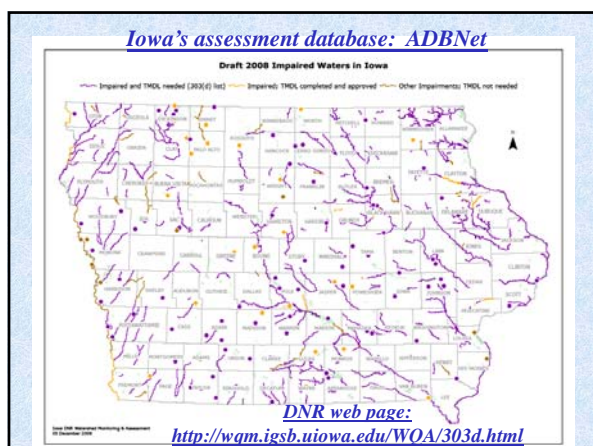


Numbers of Section 303(d) impaired waters per state; data from 2004 and 2006 listing cycles; Iowa data from draft 2008 list (see [http://iaspub.epa.gov/waters10/attains\\_nation\\_cy.control?p\\_report\\_type=T](http://iaspub.epa.gov/waters10/attains_nation_cy.control?p_report_type=T))



## Perspectives on impairment

- Most impairments are moderate
  - WQ Standards are designed to protect WQ
- Some impairments, however, are more severe:
  - lower Raccoon River (nitrate; bacteria)
  - decline of freshwater mussels in rivers & streams
  - fish kills due to animal waste (e.g., N. Fk. Maquoketa River/Bear Creek)



## Waters de-listed from the 2006 list

Total of 35 waters moved away from 2006 303(d) list (IR Category 5) for the following reasons:

- TMDL completed and approved; moved to Category 4a: 14
- More recent data shows "full support": 20
- Error in assessment that led to listing: 1
- Note: EPA is very cautious about approving de-listings.

## Iowa's DRAFT 2008 List of Waters in Need of Further Investigation [WINOFI]

- Includes waters with inconclusive evidence of impairment: more information needed
- Required by Iowa's credible data law
- Is comprised of waters in IR Subcategories 2b & 3b
- 2008 list contains 213 waters (compared to 175 in 2006 and 101 in 2004); most (~95%) are biological impairments
- List is used to prioritize monitoring

### Waters Removed from 2006 list of Waters in Need of Further Investigation

- The 2006 WINOFI list contained 175 waterbodies
- Of these, 9 were removed for the 2008 listing cycle:
  - 1 assessed as “fully supporting”; new data
  - 1 incorrectly listed due to assessment error
  - 3 re-assessed as impaired but TMDL not needed (4c)
  - 4 assessed as “impaired” and need a TMDL

### Next Steps

- IDNR will receive public comments for 60 days (December 10, 2008 through February 5, 2009)
- Based on comments received, IDNR will respond to comments, revise draft list, and send to EPA Region 7 for approval/disapproval
- Following EPA’s approval/disapproval actions, EPA will provide IDNR with the final 2008 list

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IDNR web sites for impaired waters:  
<http://wqm.igsb.uiowa.edu/WOA/303d.html>  
<http://www.iowadnr.gov/water/watershed/impaired.html>

